THE BLESSED SLEEP

Drawing by Edward L. Chase



ANESTHESIA

Second of the Three Big A's in Surgery



LL through one stormy night, when the sea beat wildly against the rugged cliffs, and the wind howled a weird requiem over Scotia's dead, a poor baker of Linlithgow walked the floor, and shuddered, as from the chamber overhead came cries of suffering. With fists clenched until nails pierced flesh, the cold sweat starting from every pore, muscles tense and rigid with the

unconscious effort to resist something irresistible, ele-mental, implacable, he walked back and forth—back and forth-in the cage of his own emotions. And he prayed, this rough-mannered, tender-hearted Scotsman, that the time would come when the cross of pain might be lifted from the mothers of men.

His prayer was heard, and answered; for after what seemed an eternity a hush—appalling, ominous—fell upon the house, a silence that set his heart to thumping, and his teeth to chattering with fear. And then a small, keen alarm shrilled forth, followed by a series of pathetic wails, and James Young Simpson was born-James Simpson—who was to temper the trials of women for all future time.

For then and there the father decided that, come what would, be the sacrifice never so great, this child should receive a medical education, should dedicate his life to the relief of womankind. And to this end the devoted family bent every endeavor.

Perhaps in all the world there is nothing nobler or more splendid than the self-immolation of the poor. But the Simpsons probably never even thought of this in the years that followed, as mother, father, and the elder children saved, scraped, and jealously hoarded the pence and shillings against the time when James should go to school.

At fourteen he entered the University of Edinburgh. Seven years later he presented his graduating thesis, "On Death from Inflammation," which so impressed the faculty that he was offered a professorship. This he accepted, devoting himself to midwifery, as it was then called. And always was he searching for something to rob motherhood of its chief terror.

THE use of stupefying drugs for deadening sensation is very ancient. In the ideographs of earliest civilizations mention is made of hemp or hashish for producing numbness before surgical operations, and over six thousand years ago the Babylonians employed mandragora. There are allusions in both the Bible and the Talmud to the utility of sleeping potions for mitigating pain in surgery.

Apuleius, the Greek, penned the cheerful announcement that "If anyone is to have a limb mutilated, burnt, or sawn, he may drink half an ounce of mandragora,

putate a leg without the person feeling it. The next day he inhaled the gas himself, and had a tooth removed when under its influence. When he recovered consciousness he exclaimed, "A new era in tooth pulling! It did not hurt me so much as the prick of a pin! It is the greatest discovery ever made!"

BY EDWIN F. BOWERS, M. D.

It is said that he was a brave man who first ate an oyster. What shall we say of the heroism of Dr. Horace

About the same time Dr. Morton used ether on a case in the Massachusetts General Hospital, and old Dr. Warren excised a tumor from the neck of a young man, under the influence of "letheon," as Morton called his preparation. When the patient awoke Warren had a difficult task convincing him that he had parted with his tumor. A few weeks later, in the presence of many of the most eminent surgeons in America, Dr. Warren did a leg amputation, which was so successful that the era of the Blessed Sleep might be truly said to date from

In fact, the American pioneers Long, Morton, Jackson, Wells, and others were having generally uniform success with nitrous oxid and ether in various dental and surgical operations.

AND away over the sea, in the clinics of his beloved Edinburgh Hospital, that shrewd, far-seeing Scot, Simpson, watched eagerly the results of this work, weighing the advantages of the different anesthetics.

These he tried faithfully in his obstetric practice, but

was forced to discard as inefficient. Laughing gas was too transient in its effects; ether not active enough, and besides it provoked horrible nausea.

WITH Drs. Keith and Matthews Duncan, his assistants, he continued testing the benumbing properties of everything that came to hand: without avail. Finally Simpson remembered that Waldie, a Liverpool chemist, had sent him a bottle containing a heavy colorless liquid, discovered by the American Guthrie sixteen years before.

He uncorked it, divided its contents into three parts, and he and his assistants started to inhale it. In a few minutes Dr. Keith tried to assassinate a fly on the opposite wall with a bootjack, Dr. Duncan started a rollicking song, and Professor Simpson insisted on telling a story that was old when Aristophanes was young. Some women visitors just then came into the room, and immediately became objects of gallant attention from these erstwhile dignified savants. The women were astonished; but their astonishment increased when these gay Don Juans, suddenly remembering their un-finished experiment, went back to their interrupted inhalation, and finally subsided one after the other into a

When Simpson recovered consciousness he sat up and exclaimed "Eureka!" in broad Scottish. Then Miss Petrie, one of the visitors, wishing to demonstrate her metal, inhaled the vapor, and fell asleep, warbling "Britons never, ne-ever-r will be sla-aves!"

Shortly afterward Simpson began to use chloroform in his obstetric cases. Instead of hailing him as a benefactor, the vials of wrath were opened, and maledictions poured upon his devoted head. But it was a hard head, and furthermore a red head, built for fighting, and Simpson sent back as good as he received. First he had to fight the reactionists; then he had to meet the criticisms of a world of dodos, with the brains of cavemen, who insisted that he was interfering with a divine ordinance when he presumed to relieve the pains of childbirth.

But Simpson, in the intrepid consciousness of right, answered with a quotation from the second chapter of Genesis, in which it is told that when the Lord resected that rib from Adam, in order to furbish up Eve a little more completely, He "caused a deep sleep to fall upon Adam, and he slept.

That didn't satisfy the malcontents, and the battle still raged, every foot of ground hotly contested by both sides, until the best loved Queen that England ever knew decided the question with her own experiences. Dr. Snow, her attending physician, placed a handkerchief saturated with a sweet, pungent liquid over her face, and Princess Victoria was born when she was yet unconscious. A year later the Queen again availed herself of the Blessed Sleep, and the victory was won for

Victoria knighted the baker's son, and he signed himself thereafter, at his pleasure, Sir James Young Simpson, Bart. And now, in Westminster Abbey, his bust, with the funny neck whiskers, looks out in beaming kindness upon thousands and thousands of women who pay him the tribute of a visit.

Obstetricians in all parts of the civilized world now use chloroform; sometimes placing in the woman's own hands the means whereby she may dull the cruel pain. This is accomplished by the simple expedient of saturating a wad of cotton with the narcotic, placing it in a cup, and letting her inhale its fumes at will. When unconscious, her arms relax, and the cup falls to the bed; to be again utilized when she returns to the world of sensibility. Thus merciful relief comes without in the slightest degree retarding progress; and with absolutely no danger to her or injury to her child.

But at first it almost seemed as though a malignant jinn guarded jealously these placid portals leading to the Land of Lethe; for upon the four principal claim-

with wine; and while he sleeps the member may be cut

Perhaps Hugh of Lucca, the inventor of the sleeping sponge, trod pretty closely upon the tail of a great idea when he rather quaintly related that "Some prescribe medicaments which send the patient to sleep, so that the incision may not be felt, such as opium, the juice of the morel" (the nightshade), "hyoscyamus" (henbane), "mandrake, ivy, hemlock, lettuce. A new sponge is soaked by them in these juices, and left to dry in the sun; and when they have need of it they put this sponge into warm water and then hold it under the nostrils of the patient until he goes to sleep. Then they perform the operation."

There are also numerous references to quelling sensibility by poets of the Elizabethan era. Iago, for instance, after he had poured his poison of wickedly false accusation into the ear of the duped Othello, exclaims:

Not poppy, nor mandragora, Nor all the drowsy syrups of the world, Shall ever medicine thee to that sweet sleep Which thou owedst yesterday.

The outcome of this "sleep," however, was always uncertain. If the patient took enough of the potion to do him any good, likely as not "he'd be dead when he woke up." Therefore he came to bear the ills he had, rather than fly to others that he knew not of.

So in those "good old days"—when a gentleman put on his clothes with the aid of a plumber, and fastened on his hat with a monkey wrench—he had to be bold. Or perhaps he merely made a virtue of necessity; for to be wounded in a manner that necessitated extensive surgery was a calamity almost worse than death itself.

So until the early years of the nineteenth century "anesthesia"-to give it the name bestowed by its genial godfather, Dr. Oliver Wendell Holmeswas relegated to the limbo of unused and neglected things.

Then Humphry Davy, the man who placed a little wire screen round the miner's unprotected lamp, and by so doing robbed the dreaded "black damp" of its explosive terror, nosed about various volatile substances, and finally demonstrated to his own satisfaction that nitrous oxid, which Priestly had recently developed, possessed anesthetic properties.

He proclaimed the fact in a work published in 1800; but human bipeds were too busy butchering and preparing to butcher one another to pay any attention to him or to his gas; and Michael Faraday's demonstration that sulphuric ether was similarly effective met with the same cavalier treatment.

It remained for America, a generation later, to put

these discoveries to practical use.

It came about in this way: Dr. Colton delivered a lecture on nitrous oxid in Hartford, Connecticut. A young dentist, a typical wideawake American, named Horace Wells, was present. Colton attempted to demonstrate the sleep-producing powers of nitrous oxid, the so-called "laughing gas," upon a young man, when the subject became excited, and hurtled round the room, colliding violently with a heavy piece of furniture. Wells noticed that he bruised himself badly, but made no complaint of the pain. The dentist remarked upon this fact to a bystander, adding that he believed it would be possible to extract a tooth or am-